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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,936	01/07/2002	George H. Lane III	11061-36469	4911
24728	7590	07/22/2004	EXAMINER	
MORRIS MANNING & MARTIN LLP 1600 ATLANTA FINANCIAL CENTER 3343 PEACHTREE ROAD, NE ATLANTA, GA 30326-1044			DESTA, ELIAS	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/041,936

Applicant(s)

LANE, GEORGE H.

Examiner

Elias Desta

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-114 is/are pending in the application.
- 4a) Of the above claim(s) 1-34, 51-76 and 89-106 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35-50, 77-88 and 107-114 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## Detailed Action

### Election

1. Applicant's election without traverse of group III, or as noted by the applicant as claims 35-50, 77-88 and 107-114 in the reply filed on September 5, 2003 is acknowledged. The categorization or assignment of the elected claims 35-50, 77-88 and 107-114 to Fig. 4 of the instant application conforms to the restriction requirement.

### Claim rejection - 35 U.S.C 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 35-44, 46-50, 77-83, 85-88 and 107-114 are rejected under 35 U.S.C. 102 (e) as being unpatentable over Li (U.S. PAP 2002/0072808)

In reference to claims 35, 77 and 107: Li teaches a method for processing maintenance work orders (see Li, Fig. 1). The method includes:

- Identifying maintenance problem (see Li, Figs. 6 and 9);
- Generating a work order for the maintenance problem in a computer, including the location of the problem and the type of the problem (see Li, Figs. 10 and 11);
- Assigning the work order to a technician to fix the problem (see Li, Fig. 14);
- Providing the technician with an electronic decision option hierarchy as the technician completes the work order (see Li, Fig. 17); and
- Providing a set of specific number of options electronically as the technician identifies each problem and electronically selects each option from the hierarchy to aid the technician in selecting the solutions for completing the work order (see Li, Figs. 24 and 25).

With regard to claims 36, 78, 79 and 108: as noted above in claims 35, 77 and 107, Li further teaches that the method includes communicating the problem to the maintenance office and identifying the main problem (see Li, Fig. 7, Pre-Diagnosis System).

With regard to claim 37: as noted above in claim 35, Li further teaches that the method includes electronic work order assignment (see Li, Fig. 23, work order entry).

With regard to claims 38 and 109: as noted above in claims 35 and 107, Li further teaches that the method includes recoding the technician work order assignment in a computer (see Li, Fig. 25).

With regard to claim 39: as noted above in claim 35, Li further teaches that the method includes that the customer identifies the maintenance problem (see Li, Fig. 24, customer statement dialogue box).

With regard to claim 40: as noted above in claim 39, Li further teaches that the method includes the customer communicating the problem to a maintenance office (see Li, Fig. 23, service request).

With regard to claims 41 and 80: as noted above in claims 40 and 79, Li further teaches that the customer communicates the problem to the maintenance office through electronic means (see Li, Fig. 1).

With regard to claims 42 and 81: as noted above in claims 39 and 78, Li further teaches that the method includes notifying the customer the completion of the work order (see Li, Fig. 17, time due).

With regard to claims 43 and 82: as noted above in claims 39 and 78, Li further teaches that the customer electronically communicates the problem and generates work order (see Li, Figs. 7 and 20).

With regard to claims 44, 83 and 110: as noted above in claims 41, 80 and 108, Li further teaches that the customer electronically checks the status of the work order (see Li, Fig. 25).

With regard to claims 46, 85 and 111: as noted above in claims 35, 77 and 107, Li further teaches that the method includes a tailored to include specific characteristic of the location (see Li, Fig. 24, analyzer).

With regard to claim 47: as noted above in claim 35, Li further teaches that the method provides entering data from the technician in the computer related to the technician completing the work order including the action taken to fix the problem and the elapsed time to complete the work order (see Li, Fig. 25 and page 4, paragraphs 57 and 68).

With regard to claims 48, 86 and 112: as noted above in claim 47, 77 and 107 Li further teaches that the method includes analyzing the elapsed time and the data to determine if training of the technician is warranted (see Li, page 2, paragraph 38).

With regard to claims 49, 87 and 113: as noted above in claims 47, 77 and 107, Li further teaches that analyzing the data and generating the reports related to the data and the technician (see Li, Figs. 14 and 24).

With regard to claims 50, 88 and 114: as noted above in claim 47, 77 and 107, Li further teaches that the method includes analyzing the data and identifying trends

(e.g., steering wheel shaking at high speed) related to the data (see Li, Figs. 23 and 24).

### Claim rejection – 35 U.S.C. 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 45 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li (U.S. PAP 2002/0072808) in view of Squeglia et al. (U.S. PAP 2002/0156692).

In reference to claims 45 and 84: as noted above in claims 35 and 77, Li further teaches that the customer transmits the work order through a computer network (see Li, Figs. 1 and 9). However, Li does not teach that the customer request for work order is transmitted through a wireless network.

Squeglia et al. teaches a computerized method and system for managing equipment maintenance and service using portable units (see Squeglia et al., Fig. 2).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the computerized work order system as taught by Li, and incorporate a wireless interface unit as shown in Fig. 1 of Squeglia et

al. in order to facilitate the customer work order with a portable networked computer device because the portable or wireless network provides the customer to communicate any maintenance related issues with the technician prime and enables the customer to send multimedia type information, such as picture clips, sound or other forms of data to the maintenance center and obtain service data from the technician (see Squeglia et al., page 7, paragraph 56).

## Conclusion

### 6. Citation of pertinent prior art:

- Sasaki et al. (IEEE Article, 'Development of Intelligent Workflow System Using Know-how acquired Based on Work Order') teaches a method of managing work flow using stored detailed process of work as work log, and finding out the "know-how" of work by analyzing the stored work-log.
- Muller et al. (IEEE Article, 'A Simulation-Based Work Order Release Mechanism For A Flexible Manufacturing System') teaches an integrated simulation model and its use for a prescriptive tool to support real-time decision- making process for work order release, fixture build-up and raw material requirement.



- Eryurek et al. (U.S. PAP 2002/0123846) teaches remote analysis of process control plant data.
- Jones et al. (U.S. PAP 2004/0062359) teaches user interface and system to facilitate telephone circuit maintenance and testing.
- Pangrac et al. (U.S. PAP 2003/0134599) teaches field technician assistant.
- Howman et al. (U.S. PAP 2003/0040826) teaches method and apparatus for managing maintenance operations.
- Tveit et al. (U.S. PAP 2002/0087220) teaches system and method to provide maintenance for an electrical power generation, transmission and distribution system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Thu (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-308-5841 for regular communications and After Final communications.

Application/Control Number: 10/041,936  
Art Unit: 2857

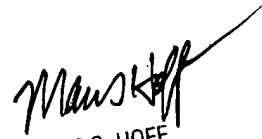
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1782.

Elias Desta  
Examiner  
Art Unit 2857

-ed

June 24, 2004

  
MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800